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NEWS 9 APR 30 CHEMCATS enhanced with 1.2 million new records  
NEWS 10 APR 30 CA/CAPLUS enhanced with 1870-1889 U.S. patent records  
NEWS 11 APR 30 INPADOC replaced by INPADOCDB on STN  
NEWS 12 MAY 01 New CAS web site launched  
NEWS 13 MAY 08 CA/CAPLUS Indian patent publication number format defined  
NEWS 14 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display fields  
NEWS 15 MAY 21 BIOSIS reloaded and enhanced with archival data  
NEWS 16 MAY 21 TOXCENTER enhanced with BIOSIS reload  
NEWS 17 MAY 21 CA/CAPLUS enhanced with additional kind codes for German patents  
NEWS 18 MAY 22 CA/CAPLUS enhanced with IPC reclassification in Japanese patents  
NEWS 19 JUN 27 CA/CAPLUS enhanced with pre-1967 CAS Registry Numbers  
NEWS 20 JUN 29 STN Viewer now available  
NEWS 21 JUN 29 STN Express, Version 8.2, now available  
NEWS 22 JUL 02 LEMBASE coverage updated  
NEWS 23 JUL 02 LMEDLINE coverage updated  
NEWS 24 JUL 02 SCISEARCH enhanced with complete author names  
NEWS 25 JUL 02 CHEMCATS accession numbers revised  
NEWS 26 JUL 02 CA/CAPLUS enhanced with utility model patents from China  
  
NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 4 MAY 2007.  
  
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=> s acetylation and dendrimer?

69650 ACETYLATION

9536 DENDRIMER?

L1 27 ACETYLATION AND DENDRIMER?

=> d

L1 ANSWER 1 OF 27 CA COPYRIGHT 2007 ACS on STN

AN 146:317121 CA

TI Lactotriaoase-containing carbosilane dendrimers: Syntheses and lectin-binding activities

AU Yamada, Akihiro; Hatano, Ken; Koyama, Tetsuo; Matsuoka, Koji; Takahashi, Naonori; Hidari, Kazuya I. P. J.; Suzuki, Takashi; Suzuki, Yasuo; Terunuma, Daiyo

CS Area for Molecular Function, Division of Material Science, Graduate School of Science and Engineering, Saitama University, Sakura-ku, Saitama, 338-8570, Japan

SO Bioorganic & Medicinal Chemistry (2007), 15(4), 1606-1614  
CODEN: BMECEP; ISSN: 0968-0896

PB Elsevier Ltd.

DT Journal

LA English

OS CASREACT 146:317121

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 27

L1 ANSWER 27 OF 27 CA COPYRIGHT 2007 ACS on STN

AN 116:130381 CA

TI Preparation of siloxane dendrimers  
 IN Uchida, Hiroaki; Yoshino, Koji; Kabe, Yoshio  
 PA Kao Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 03263430	A	19911122	JP 1990-62250	19900313
	JP 2763646	B2	19980611		
PRAI	JP 1990-62250		19900313		

=> d ti 20-26

L1 ANSWER 20 OF 27 CA COPYRIGHT 2007 ACS on STN  
 TI Hyperbranched Thermotropic Liquid Crystalline Polyesters Composed of Aromatic Ester Type Mesogens and Polymethylene Spacers  
  
 L1 ANSWER 21 OF 27 CA COPYRIGHT 2007 ACS on STN  
 TI The first organometallic dendrimers: Design and redox functions  
  
 L1 ANSWER 22 OF 27 CA COPYRIGHT 2007 ACS on STN  
 TI Utilization of dendritic framework as a multivalent ligand: a functionalized gadolinium(III) carrier with glycoside cluster periphery  
  
 L1 ANSWER 23 OF 27 CA COPYRIGHT 2007 ACS on STN  
 TI An infrared spectroscopic study of a hyperbranched, dendrimer-like, polyester and its blends with poly(4-vinylphenol)  
  
 L1 ANSWER 24 OF 27 CA COPYRIGHT 2007 ACS on STN  
 TI Average and maximum charge states of arginine-containing dendrimer-like peptide ions formed by electrospray ionization  
  
 L1 ANSWER 25 OF 27 CA COPYRIGHT 2007 ACS on STN  
 TI Synthesis and antigenic properties of sialic acid based dendrimers  
  
 L1 ANSWER 26 OF 27 CA COPYRIGHT 2007 ACS on STN  
 TI A simple procedure for the preparation of chiral tris(hydroxymethyl)methane derivatives

=> d 22

L1 ANSWER 22 OF 27 CA COPYRIGHT 2007 ACS on STN  
 AN 134:71998 CA  
 TI Utilization of dendritic framework as a multivalent ligand: a functionalized gadolinium(III) carrier with glycoside cluster periphery  
 AU Takahashi, Masaki; Hara, Yusuke; Aoshima, Kengo; Kurihara, Hideo; Oshikawa, Tatsuo; Yamashita, Mitsuji  
 CS Department of Materials Science and Chemical Engineering, Faculty of Engineering, Shizuoka University, Shizuoka, 432-8561, Japan  
 SO Tetrahedron Letters (2000), 41(44), 8485-8488  
 CODEN: TELEAY; ISSN: 0040-4039  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d kwic 22

L1 ANSWER 22 OF 27 CA COPYRIGHT 2007 ACS on STN

AB . . . diethylenetriamine with  $\delta$ -gluconolactone, using acetic anhydride to protect the hydroxyl groups. The complexes were obtained by heating the mixture of dendrimer ligand and Gd<sub>2</sub>O<sub>3</sub> in aqueous solution at 100°. The acetyl groups could be cleaved by NaOMe treatment. The dendrimers, which contain four and twelve glucose moieties on the mol. surface were obtained with good yields in every step. The . . . analyses show the dendritic structure, while the formation of gadolinium chelates was deduced on the basis of HPLC data. The dendrimer -Gd chelates are of interest as contrast agents for MRI studies, with the dendrimer-glycoside cluster acting as carrier of the contrast agent.

ST diethylenetriamine pentaacetate coupling cyclic anhydride  
dendrimer prepn; glycoside periphery polyamide dendrimer  
chelate lanthanide; gadolinium complex glycoside polyamide  
dendrimer prepn

IT Polyamides, preparation  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(dendrimers, glycoside-functionalized; preparation of  
glycoside-functionalized polyamide dendrimer multivalent  
ligands and complexation with gadolinium and structure and solubility of  
chelates)

IT Polymer chains  
(hyperbranched; preparation of glycoside-functionalized polyamide  
dendrimer multivalent ligands and complexation with gadolinium  
and structure and solubility of chelates)

IT Addition reaction  
(nucleophilic; preparation of glycoside-functionalized polyamide  
dendrimer multivalent ligands and complexation with gadolinium  
and structure and solubility of chelates)

IT Dendritic polymers  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(polyamides, glycoside-functionalized; preparation of glycoside-  
functionalized polyamide dendrimer multivalent ligands and  
complexation with gadolinium and structure and solubility of chelates)

IT Acetylation  
Amidation  
Complexation  
Coupling reaction  
(preparation of glycoside-functionalized polyamide dendrimer  
multivalent ligands and complexation with gadolinium and structure and  
solubility of chelates)

IT 220431-60-7P 220431-61-8P 314732-91-7P 314732-92-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(intermediate; preparation of glycoside-functionalized polyamide  
dendrimer multivalent ligands and complexation with gadolinium  
and structure and solubility of chelates)

IT 314732-93-9P 314748-77-1P  
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP  
(Preparation); RACT (Reactant or reagent)  
(preparation of glycoside-functionalized polyamide dendrimer  
multivalent ligands and complexation with gadolinium and structure and  
solubility of chelates)

IT 7440-54-2DP, Gadolinium, glycosidyl dendrimer complexes,  
preparation 314732-94-0P 314748-78-2P  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation of glycoside-functionalized polyamide dendrimer  
multivalent ligands and complexation with gadolinium and structure and  
solubility of chelates)

IT 90-80-2,  $\delta$ -Gluconolactone 108-24-7, Acetic anhydride 111-40-0,  
Diethylenetriamine 4248-19-5, tert-Butyl carbamate 12064-62-9,  
Gadolinium oxide (Gd<sub>2</sub>O<sub>3</sub>) 132491-90-8 195190-58-0, Diethylenetriamine

pentaacetic acid bis(cyclic anhydride)  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of glycoside-functionalized polyamide dendrimer  
multivalent ligands and complexation with gadolinium and structure and  
solubility of chelates)

=> d 25 ab

L1 ANSWER 25 OF 27 CA COPYRIGHT 2007 ACS on STN

AB A symposium on solid-phase synthesis on Wang resin was used to construct dendritic  $\alpha$ -thiosialosides which can be used as inhibitors of influenza virus hemagglutinins. The design of these new hyper-branched clusters is based on the rational scaffolding of L-lysine core structures using well established Fmoc-chemical and benzotriazolyl esters as coupling procedures. One step chain extension of all the lysyl-amino groups with chloroacetylglucylglycine active ester allowed the introduction of the required functionality necessary for the coupling to  $\alpha$ -thiosialoside derivative prepared under improved phase transfer catalyzed conditions. Well defined di-, tetra-, octa- and hexadecavalent dendritic  $\alpha$ -thiosialosides were thus prepared by a straight forward approach. The antigenicity of the dendrimers was compared to a known sialylated polymer used as reference. Regioselective 9-O-acetylation of the octavalent dendrimers was also achieved to provide access to inhibitor of other strains of influenza virus hemagglutinins.

=> d ti 10-19

L1 ANSWER 10 OF 27 CA COPYRIGHT 2007 ACS on STN

TI Poly(amidoamine) dendrimer-based multifunctional engineered nanodevice for cancer therapy

L1 ANSWER 11 OF 27 CA COPYRIGHT 2007 ACS on STN

TI Synthesis of perfluorinated functionalized, branched ethers

L1 ANSWER 12 OF 27 CA COPYRIGHT 2007 ACS on STN

TI Synthesis of telechelic and dendritic graft polymers

L1 ANSWER 13 OF 27 CA COPYRIGHT 2007 ACS on STN

TI DNA-Directed Synthesis of Generation 7 and 5 PAMAM Dendrimer Nanoclusters

L1 ANSWER 14 OF 27 CA COPYRIGHT 2007 ACS on STN

TI Extended  $\pi$ -Conjugated Dendrimers Based on Truxene

L1 ANSWER 15 OF 27 CA COPYRIGHT 2007 ACS on STN

TI Acetylation of Poly(amidoamine) Dendrimers

L1 ANSWER 16 OF 27 CA COPYRIGHT 2007 ACS on STN

TI Soluble dipolar dendrimers with peripheral sulfone groups

L1 ANSWER 17 OF 27 CA COPYRIGHT 2007 ACS on STN

TI <sup>1</sup>H and <sup>13</sup>C NMR Spectra of a Hyperbranched Aromatic Polyamide from p-Phenylenediamine and Trimesic Acid

L1 ANSWER 18 OF 27 CA COPYRIGHT 2007 ACS on STN

TI Hyperbranched architectures for NLO polymers

L1 ANSWER 19 OF 27 CA COPYRIGHT 2007 ACS on STN

TI Synthesis of clustered xenotransplantation antagonists using palladium-catalyzed cross-coupling of prop-2-ynyl  $\alpha$ -D-galactopyranoside

=> d 15

L1 ANSWER 15 OF 27 CA COPYRIGHT 2007 ACS on STN  
AN 139:197903 CA  
TI Acetylation of Poly(amidoamine) Dendrimers  
AU Majoros, Istvan J.; Keszler, Balazs; Woehler, Scott; Bull, Tricia; Baker, James R., Jr.  
CS Center for Biologic Nanotechnology, University of Michigan, Ann Arbor, MI, 48109-0533, USA  
SO Macromolecules (2003), 36(15), 5526-5529  
CODEN: MAMOBX; ISSN: 0024-9297  
PB American Chemical Society  
DT Journal  
LA English  
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ab 15

L1 ANSWER 15 OF 27 CA COPYRIGHT 2007 ACS on STN  
AB The precise stoichiometry required for the acetylation of surface amines of a poly(amidoamine) (PAMAM) dendrimer generation 5 (G5) was verified by using potentiometric titration, gel permeation chromatog., and NMR spectroscopy. The average number of primary amine groups, absolute mol. weight, and mol. weight distribution of G5 PAMAM were determined by potentiometric titration and GPC. These fundamental parameters were used to design the stoichiometry of an acetylation reaction that yielded acetylation fractions from 0 to 100% of the primary amines on the macromol. GPC refractive index detector confirmed that the diameter of the dendrimer related inversely to the degree of acetylation. The acetylated dendrimers do not follow the elution behavior of the conventional polymer mols. most probably because of their spherical shape and polycationic nature. This study clarifies the nature of the acetylation reaction and provides a well-defined acylated macromol., which can serve as a scaffold for the development of complex dendrimeric structures.

=> d 13, 16

L1 ANSWER 13 OF 27 CA COPYRIGHT 2007 ACS on STN  
AN 140:357830 CA  
TI DNA-Directed Synthesis of Generation 7 and 5 PAMAM Dendrimer Nanoclusters  
AU Choi, Youngseon; Mecke, Almut; Orr, Bradford G.; Holl, Mark M. Banaszak; Baker, James R., Jr.  
CS Department of Biomedical Engineering, School of Engineering, Department of Physics, School of Literature, Art and Science, University of Michigan, Ann Arbor, MI, 48109, USA  
SO Nano Letters (2004), 4(3), 391-397  
CODEN: NALEFD; ISSN: 1530-6984  
PB American Chemical Society  
DT Journal  
LA English  
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 16 OF 27 CA COPYRIGHT 2007 ACS on STN  
AN 138:89532 CA  
TI Soluble dipolar dendrimers with peripheral sulfone groups

AU Lu, Meng; Pan, Yongchun; Peng, Zhonghua  
CS Department of Chemistry, University of Missouri-Kansas City, Kansas City,  
MO, 64110, USA  
SO Tetrahedron Letters (2002), 43(44), 7903-7906  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
OS CASREACT 138:89532  
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ab 13,16

- L1 ANSWER 13 OF 27 CA COPYRIGHT 2007 ACS on STN  
AB A novel nanostructure was constructed using two different generations of polyamidoamine (PAMAM) dendrimers and three sets of complementary oligonucleotides (34, 50, and 66 bases in length). The oligonucleotides were covalently conjugated to partially acetylated generation 5 and 7 PAMAM dendrimers, and these conjugates were characterized by agarose gel electrophoresis. The agarose gel electrophoresis appearance of these covalently linked oligonucleotide dendrimers was also compared to electrostatically bound oligonucleotide-dendrimer complexes. Equimolar amts. of the G5 and G7 conjugates were then hybridized together to allow for the DNA-directed self-assembly of supramol. clusters. Dynamic light scattering (DLS) anal. indicated that the overall size of the DNA-linked dendrimer clusters tended to increase according to the length of the oligonucleotide used ranging from 30 to 50 nm, which agreed with the diameter of dendrimer nanoclusters predicted by mol. modeling. The DNA-linked novel dendrimer nanoclusters were also examined with tapping-mode atomic force microscopy (AFM) to distinguish the DNA-linked structure from a nonlinked simple G7/G5 dendrimer mixture AFM image anal. suggested that the distance between the DNA-linked dendrimers was significantly larger than what was seen after simple mixing of G7/G5 dendrimers. The mixture showed a few dendrimers phys. in contact with an interdendrimer distance of 8-10 nm. The interdendrimer distance of the nanoclusters linked with the 50-base-long oligonucleotide pairs was measured to be  $21 \pm 2$  nm, which is in agreement with the theor. length of the oligonucleotides duplex. These results suggest that PAMAM dendrimers can be self-assembled via complementary oligonucleotides to form supramol. nanoclusters.
- L1 ANSWER 16 OF 27 CA COPYRIGHT 2007 ACS on STN  
AB A dipolar dendron based on meta and para linked poly(Ph acetylene)s with eight electron donor-acceptor pairs in direct conjugations is synthesized through a convergent approach. UV-vis absorption and fluorescence emission spectra of the G1, G2, and G3 nonlinear optical sulfone-containing dendrons are given.